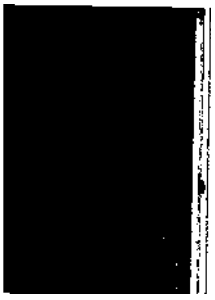
282	Gas on Gas	Air on Air	Gas on Waste Gas	Air on Waste Gas
Draft depression in kg per m^2 or mm of			27.983	23.516
7= fractional resistance in flue from valve,			0.684	0.320
•S— velocity pressure in flue from valves,			0.760	0.730
Total draft depression required at point of			29.427	24.566
y = f rictional resistance in flue to stack or			0.676	
5 = velocity pressure required for stack flue			1 520	
Total draft depression at base of stack or			31 623	



In the foregoing, Mojarow's value for the coefficient of friction (m = 0.016) was used. This coefficient was derived from observations made on Massick and Crook and Cowper hot-blast stoves. .It is probably correct where a considerable portion of the flue system consists of checkerwork. Murge, however, has determined the coefficients of friction of air at low temperatures in mine galleries. The work was done very carefully. The coefficient is one-third of that obtained by Mojarow, and is probably a closer approximation when the flues are large and open. A further confirmation of the fact that Mojarow's value is too high lies in the fact that, in several cases where furnaces in service have been analyzed, the computations showed the necessity for forced draft. These furnaces were in operation without forced draft, but in a more or less defective manner, giving operating troubles and having a shorter campaign than normal. Applying Murge's value for the coefficient of friction, the friction losses are reduced,

as is also the total draft depression required. The revised values follow: